For Direct Current or Direct Voltage



Moving-coil movement, 240° scale Narrow front frame per DIN 43 718, matt black



Technical Data V-PQ 96-250

Front Dimensions mm Type	48 x 48 V-PQ 48-250	72 x 72 V-P0 72-250	96 x 96 V-PQ 96-250	144 x 144 P0 144-250
Scale Length mm	73	113	151	235
Class	1.5	1.5	1.5	1.5
Weight approx. (kg)	0.16	0.2	0.25	0.65
Operating Voltage	300 V	600 V	600 V	600 V
Test Voltage	3.5 kV	5.8 kV	5.8 kV	5.8 kV
Front Housing-Panel Protection	IP 52	IP 52	IP 52	IP 52
Fasteners (see next page)	leaf spring	screw clip S	screw clip S	screw clip G
Housing Material	polycarbonate	polycarbonate	polycarbonate	sheet metal
Interchangeable Scale	yes	yes	yes	no

#### Description

Analog panel meter with moving-coil movement

#### Display

Scale Division Coarse-fine

pointer Beam pointer with knife-edge

### **Mechanical Design**

Housing Material Polycarbonate, self-extinguishing and drip-proof per UL 94 V · O

or sheet metal housing (see above).

Sheet metal housing available as option for type V-PQS 72 and

V-PQS 96

Replaceable Glass windows, front frames and scales (interchangeable

scales not available for panel meters with front panel

dimensions of 144 x 144 mm)

⇒ May only be replaced under voltage-free conditions!

Terminals M4 (Voltmeter and Ammeter  $\leq$  4 A) or

M6 (Voltmeter > 4 A).

 $\mbox{M4}$  screw terminals with self-lifting terminal clips. Screws

can be turned with a cross-head or standard screw drivers

Contact Protection Available as option

### **Reference Conditions**

Reference Quantities	Reference Conditions
Ambient Temperature	23 °C ± 2 °C
Position of Use	control panel vertical ± 1°
Other	DIN EN 60 051

### Internal Resistance / Voltage Drop / Current Consumption 1)

Measuring Range	Ri	Tolerance
100 <i>μ</i> Α	10300 $\Omega$	
150 µA	8210 $\Omega$	
250 µA	2870 $\Omega$	
400 μA	1770 $\Omega$	
600 µA	$773\Omega$	
1 mA	337 $\Omega$	
1.5 mA	167 $\Omega$	±20 %
2 mA	$97\Omega$	
2.5 mA	$52\Omega$	
4 mA	$25 \Omega$	
5 mA	16.3 Ω	
6 mA	14.2 Ω	
10 mA	$3\Omega$	
15 mA	$6.5\Omega$	
20 mA	$5\Omega$	±30 %
4 20 mA	$6.5\Omega$	
25 mA	6 Ω	
> 25 mA	Voltage Drop 150 mV	
Connection to Shunt	Current Consumption 1	0 mA
150 mV	75 Ω	
250 mV	125 $\Omega$	
400 mV	200 $\Omega$	±20 %
600 mV	$300\Omega$	
≥ 1 V	1000 Ω/V	

<sup>1)</sup> Indicated internal resistance is only valid for instruments with standard accuracy class.

Please inquire regarding internal resistance (Ri) for moving-coil indicators with mechanical zero point at any desired scale value.

### For Direct Current or Direct Voltage

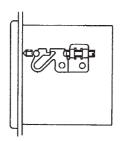


### **Leaf Spring**



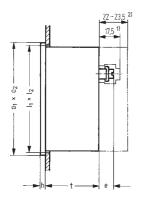
Control panel thickness 1 to 3 mm. For size  $48 \times 48$  mm, not available for Mauell-Grid. Also available as option for sizes  $72 \times 72$  and  $96 \times 96$  mm.

### Screw Clip G

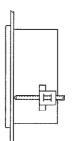


Control panel thickness 1 to 32 mm. Special screw clamp M4 required for size 144 x 144 mm.

### **Basic Dimensions**



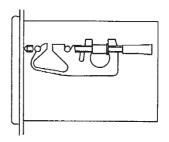
### Screw Clip S



Control panel thickness 1 to 25 mm. Special screw clamp M4 required for sizes  $72\,x\,72$  and  $96\,x\,96$  mm.

Also available as option for size 48 x 48 mm, not available for Mauell-Grid.

### Fastener B DIN 43 835



Control panel thickness 1 to 40 mm. Screw clamp M4 as option for:

Sheet metal housings  $72 \times 72$  and  $96 \times 96$  mm with cone head rivets and size  $144 \times 144$  mm.

### Drawings to Scale (on request)

0101A258 for size 48 x 48 mm 0101A259 for sizes 72 x 72 and 96 x 96 mm 0101A261 sheet 1 for size 144 x 144 mm

### Ordering Example

Panel meter 96 x 96 mm 240° Scale 0 ... 40 V Direct Voltage

Type	Order No.
V-PQ 96-250	1605P, DC40

Front Dimensions	Nominal Dimen	sions	<b>Cutout Dimensions</b>	Installation Depth	Termi	nals
					≤ 4 A	> 4 A
	<b>a</b> <sub>1</sub> x a <sub>2</sub>	h	$I_1 \times I_2$	t	M4 e	M6 e
48 x 48 72 x 72 96 x 96 144 x 144	48 x 48 72 x 72 96 x 96 144 x 144	5 5 5 8	45 <sup>+0.8</sup> x 45 <sup>+0.8</sup> 68 <sup>+0.7</sup> x 68 <sup>+0.7</sup> 92 <sup>+0.8</sup> x 92 <sup>+0.8</sup> 138 <sup>+1</sup> x 138 <sup>+1</sup>	43.5 43.5 43.5 44.5	12.5 12.5 12.5 12.5	- 17 18 18

<sup>1)</sup> Single terminal cover

<sup>2)</sup> Overall terminal cover (22 mm for panel meters with front panel dimensions of 48 x 48 mm only)





Moving-coil movement, 240  $^{\circ}$  scale Narrow front frame per DIN 43 718, matt black

'A' = Extra Charge  $\cdot$  '+' = Available without extra Charge  $\cdot$  '-' = Not available

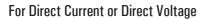
	Type Order No. ⇒	V-PQ 48-250 1668P	V-PQ 72-250 <sup>1)</sup> 1602P	V-PQ 96-250 <sup>1)</sup> 1605P	PQ 144-250 1621P
ero Point at left	+ ↓				
Direct Current					
Range:					
0 100 μA	CA100	Α	Α	Α	Α
0 150 μA	CA150	Α	Α	Α	Α
0 250 μA	CA250	Α	Α	Α	Α
0 400 μA	CA400	Α	Α	Α	Α
0 600 μA	CA600	Α	Α	Α	Α
0 $>$ 100 $\mu$ A $<$ 1 mA $^{2)}$	CA	A	Α	Α	Α
0 1 mA	CB1	+	+	+	+
0 1.5 mA	CB1.5	+	+	+	+
0 2.5 mA	CB2.5	+	+	+	+
0 4 mA	CB4	+	+	+	+
0 5 mA	CB5	+	+	+	+
0 6 mA	CB6	+	+	+	+
0 10 mA	CB10	+	+	+	+
0 15 mA	CB15	Α	Α	Α	Α
0 20 mA	CB20	Α	Α	Α	Α
0 25 mA	CB25	Α	Α	Α	Α
0 40 mA	CB40	Α	Α	Α	Α
0 50 mA	CB50	Α	Α	Α	Α
0 60 mA	CB60	Α	Α	Α	Α
0 100 mA	CB100	Α	Α	Α	Α
0 150 mA	CB150	Α	Α	Α	Α
0 250 mA	CB250	A	A	A	A
0 400 mA	CB400	A	A	A	A
0 600 mA	CB600	A	A	A	A
$0 \dots > 1 \text{ mA} \dots < 1 \text{ A}^{2}$	CB	A	A	A	A
4 20 mA <sup>3)</sup>	BC10	A	A	A	A
0/4 20 mA <sup>4)</sup>	BC25	Α	Α	Α	Α
0 1 A	CC1	A	A	A	A
0 1.5 A	CC1.5	Α	Α	Α	Α
0 2.5 A	CC2.5	Α	Α	Α	Α
0 4 A	CC4	Α	Α	Α	Α
0 6 A	CC6	_	Α	Α	Α
0 10 A	CC10	_	Α	Α	Α
0 15 A	CC15	_	Α	Α	Α
0 25 A	CC25	_	Α	Α	Α
0 40 A	CC40	_	Α	Α	Α
$0 \dots > 1 A \dots < 40 A^{2)}$	CC	Α	Α	Α	Α
(Max. 4 A with size 48 x 48 mm)					

<sup>1)</sup> For sheet metal housings with cone head rivets please see "Housing Variants"

<sup>2)</sup> Specify in clear text

<sup>3)</sup> Mechanical suppressed

<sup>4)</sup> Electrical suppressed





Moving-coil movement, 240  $^{\circ}$  scale Narrow front frame per DIN 43 718, matt black

'A' = Extra Charge  $\cdot$  '+' = Available without extra Charge  $\cdot$  '-' = Not available

<u>-</u>					
	Type Order No. ⇒	V-PQ 48-250 1668P	V-PQ 72-250 <sup>1)</sup> 1602P	V-PQ 96-250 <sup>1)</sup> 1605P	PQ 144-250 1621P
ero Point at left	+ ↓				
onnection to shunt (direct current)	1 1				
A / 60 mV	BE3	+	+	+	Α
A / 00 mV	BE4				A
A   150 IIIV		+ ^	+ ^	+	
A / > 60 mV <sup>2)</sup>	BE981	Α	Α	Α	Α
Scale:					
1 A	CG1	+	+	+	+
1.5 A	CG1.5	+	+	+	+
2.5 A	CG2.5	+	+	+	+
4 A	CG4	+	+	+	+
6 A	CG6	+	+	+	+
10 A	CG10	+	+	+	+
15 A	CG15	+	_	_	<u>.</u>
25 A	CG25	+	+		
		T .	<del>T</del>	T .	<b>T</b>
40 A	CG40	+	+	+	+
60 A	CG60	+	+	+	+
100 A	CG100	+	+	+	+
150 A	CG150	+	+	+	+
250 A	CG250	+	+	+	+
400 A	CG400	+	+	+	+
500 A	CG350	+	+	+	+
600 A	CG600	+	+	+	+
$0 > 1 A < 1 kA^{3}$		+	+	+	
U > I A < I KA	CG	+	+	+	+
1 kA	CH1	+	+	+	+
1.5 kA					
	CH1.5	+	+	+	+
2.5 kA	CH2.5	+	+	+	+
4 kA	CH4	+	+	+	+
5 kA	CH5	+	+	+	+
6 kA	CH6	+	+	+	+
10 kA	CH10	+	+	+	+
15 kA	CH15	+	+	+	+
$> 1 \text{ kA}^{-2}$	CH	+	+	+	+
> 1 KA	011	'	<u>'</u>	'	'
Direct Voltage					
Range:					
0 150 mV	DB150	Α	Α	Α	Α
0 250 mV	DB250	A	A	A	A
0 400 mV	DB400	A	A	A	A
0 600 mV	DB600	Α	Α	Α	Α
$0 > 150 \text{ mV } < 1 \text{ V}^{-3}$	DB	Α	Α	Α	Α
-					
0 1 V	DC1	Α	Α	Α	Α
0 1.5 V	DC1.5	Α	Α	Α	Α
0 2.5 V	DC2.5	Α	Α	Α	Α
0 3 V	DC3	A	A	A	A
0 4 V	DC4	Ä	Ä	Ä	Ä
0 6 V	DC6	Ä	Ä	Ä	Ä
0 0 V 0 10 V					
0 10 V	DC10	A	A	A	A
0 15 V	DC15	A	A	A	A
0 25 V	DC25	Α	Α	A	A
0 40 V	DC40	Α	Α	Α	Α
0 60 V	DC60	Α	Α	Α	Α
0 100 V	DC100	Α	Α	Α	Α
0 150 V	DC150	Ä	Ä	A	A
0 250 V	DC250	Ä	Ä	Ä	Ä
		n			
0 400 V	DC400	_	A	A	A
0 500 V	DC500	_	A	A	A
0 600 V	DC600	-	Α	A	Α
$0 > 1 V < 600 V^{3) 4}$	DC	_	Α	Α	Α
Connection to separate voltage divider	5)				
kV / <b>25</b> V (250 μA)	BE76	Α	Α	Α	Α
, <b>_0</b> • \200 µN	32.0	**	**	• •	**

<sup>1)</sup> For sheet metal housings with cone head rivets please see "Housing Variants"

<sup>2)</sup> Upper value > 60 mV

<sup>3)</sup> Specify in clear text

<sup>4)</sup> Higher Voltages - see voltage deviders, page 129

<sup>5)</sup> Voltage dividers - see page 129





### Moving-coil movement, 240° scale Narrow front frame per DIN 43 718, matt black

### Please note when ordering:

Only one Identification No. with the same letter sequence may be chosen. Order No. with Identification No. N (standard model) can be left out.

ero Point ero point at left ero point at center ero point as desired (specify in clear text) ero point at left, mech. suppressed (not 4-20 mA) Max. Suppression 20%; measuring ranges ≥250 μA / ≥250 mV, Ri 1kΩ/V; specify in clear text)  nternal Resistance with Voltmeters tandard (see technical data)	Identification +   BC1 BC2 BC20 BC16	N A A A	N A A A	N A A A	N A A A
ero point at left ero point at center ero point at center ero point as desired (specify in clear text) ero point at left, mech. suppressed (not 4·20 mA) Max. Suppression 20%; measuring ranges ≥250 μA / ≥250 mV, Ri 1kΩ/V; specify in clear text)  Internal Resistance with Voltmeters tandard (see technical data)	BC2 BC20 BC16	A A	A A	A A	A A
ero point at center ero point at center ero point as desired (specify in clear text) ero point at left, mech. suppressed (not 4·20 mA) Max. Suppression 20%; measuring ranges ≥250 μA / ≥250 mV, Ri 1kΩ/V; specify in clear text)  Internal Resistance with Voltmeters tandard (see technical data)	BC2 BC20 BC16	A A	A A	A A	A A
ero point as desired (specify in clear text) ero point at left, mech. suppressed (not 4-20 mA) Max. Suppression 20%; measuring ranges $\geq 250~\mu\text{A}~/ \geq 250~\text{mV}$ , Ri $1\text{k}\Omega/\text{V}$ ; specify in clear text) internal Resistance with Voltmeters tandard (see technical data)	BC20 BC16	Α	A	Α	Α
ero point at left, mech. suppressed (not 4-20 mA) Max. Suppression 20%; measuring ranges $\simeq 250~\mu\text{A}~/ \simeq 250~\text{mV}$ , Ri $1\text{k}\Omega/\text{V}$ ; specify in clear text) internal Resistance with Voltmeters tandard (see technical data)	BC16 IR99				
Max. Suppression 20%; measuring ranges $\geq 250~\mu\text{A}~/~ \geq 250~\text{mV}$ , Ri $1\text{k}\Omega/\text{V}$ ; specify in clear text) atternal Resistance with Voltmeters tandard (see technical data)	IR99	Α	А	А	А
tandard (see technical data)					
		N	N	N	N
i approx. 10 k $\Omega$ /V (measuring input $\geq$ 4 V)	IR10	A	A	A	A
$i = 1 k\Omega / V \pm 1 \%$ at nominal temperature	IR30	A	A	A	A
(measuring input $\geq 1 \text{ V}$ )					
i = 10 kΩ/V $\pm 1$ % at nominal temperature (measuring input $\ge 4$ V)	IR53	A	А	А	A
otentiometer for Adjustment with Voltmeters	MDOO	N	NI.	NI.	NI.
oltmeters without potentiometer for adjustment	MP99	N	N	N	N
oltmeters with potentiometer for adjustment djustment range $\pm 15$ % (Measuring input $\geq$ 6 V / $\leq$ 5% i as listed; Class 1.5 only)	<b>MP1</b> 50 V;	_	A	A	А
ead Resistor when connecting to					
hunt ResistorsA / 60 mV andA / 150 mV	1000				
tandard version 0.06 $\Omega$	1G99 1G999	N	N	N	N
iffering from 0.06 $\Omega$ (specify in clear text) imiting values:A / 60 mV for class 1.5 max. 1 $\Omega$ A / 150 mV in Klasse 1.5 max. 7 $\Omega$	16999	A	A	A	A
ccuracy					
lass 1.5	IE15	N	N	N	N
lass 1.0 (Measuring input $\geq$ 100 $\mu$ A / $\geq$ 60 mV; with 72 x 72 in combination with fine division and eam pointer with knife-edge only)	IE11	-	А	A	A
osition of Use					
ontrol panel vertical	LA1	N	N	N	N
ontrol panel horizontal	LA2	+	+ ^	+ ^	+ ^
ther Please specify angle between scale and horizontal)	LA999	А	А	А	А
pecial Features					
ormal vibration and shock resistance	LN99	N	N	N	N
uitable for marine use with the following approvals:	LNO	٨	۸	۸	۸ ،
ermanischer Lloyd  V 0501 Gorman Nouv	LN2	Α	<b>A</b> + <sup>1)</sup>	A + 1)	A )
V 0001 definal Navy ≥ 250 µA	LN1 LN6	_	+ '' _ 2)	+ '' _ 3)	A on
v 3340 German Navy ibration resis. 2.5 g, Shock resis. 30 g	LN56	A 5)	Α	A	reques
ibration resis. 5 g, Shock resis. 50 g	LN55	A <sup>5)</sup>	A	A	A A <sup>6)</sup>

<sup>1)</sup> Contains sheet metal housing with cone head rivets (Ident. ML4) and fastener B (Ident. MN11)

<sup>2)</sup> Type PQS 72-250 according to special data sheet

<sup>3)</sup> Type POS 96-250 according to special data sheet

See special data sheet
 Available only in combination with screw clip S
 Available only in combination with fastener B DIN 43835





# Moving-coil movement, 240 $^{\circ}$ scale Narrow front frame per DIN 43 718, matt black

### Please note when ordering:

Only one Identification No. with the same letter sequence may be chosen. Order No. with Identification No. N (standard model) can be left out.

		Type Order No. ⇒	V-PQ 48-250 1668P	V-PQ 72-250 1602P	V-PQ 96-250 1605P	PQ 144-250 1621P
		Identification				
SCALE VARIANTS		+ ↓				
Scale						
In accordance with measi	uring input	GF99	N	N	N	N
Blank Scale (lower/up)	per value markings,	GF28	+	+	+	+
company	logos, symbols)					
Scale Characteristics						
Current / Voltage linear		SD1	N	N	N	N
According to curve (not o	current / voltage linear)	SD6	Α	Α	Α	Α
Division and Pointer						
Single division		GD1	N	N	N	N
Double division		GD2	Α	Α	Α	Α
Coarse-fine division		SE1	N	N	N	N
Fine division		SE3	_	Α	Α	Α
Beam pointer with f	or single division	RA1	N	N	N	N
knife-edge 1	or double division	RA2	+	+	+	+
	or single division	RA10	Α	Α	Α	Α
1	or double division	RA11	_	Α	Α	Α
Bar indicator f	for single division	RA40	Α	Α	Α	Α
Additional Imprint						
Second numbering (specif	y in clear text)	SK992	Α	Α	Α	Α
Inscription:						
Without additional inscrip	tion	SM99	N	N	N	N
Inscription ≤ 15 cha	racters German	SM991	Α	Α	Α	Α
•	racters German	SM992	Α	Α	Α	Α
≤ 15 cha	aracters other language	SM993	Α	Α	Α	Α
>15 cha	aracters other language	SM994	Α	Α	Α	Α
(Other language in Latin letteri	ng. specify in clear text)					
	002 (specify in clear text)	ST991	Α	Α	Α	Α
	RAL 1021. green RAL 6018					
or red RAL 2002 (specify		SU991	Α	Α	Α	Α
Scale Characteristics						
Interchangeable scale		SA10	N	N	N	_
Screw mounted scale		SA11	A	A	A	$N^{1)}$
Anti-parallax scale (with I	par indicator and single division)	SA5	A	A	A	A

<sup>1)</sup> Standard version without extra charge





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	Type Order No. ⇒	V-PQ 48-250 1668P	V-PQ 72-250 1602P	V-PQ 96-250 1605P	PQ 144-250 1621P
	Identification				
SCALE VARIANTS	+ ↓				
Scale / Pointer Colours					
Scale white; imprint and pointer black	SG99	N	N	N	N
Scale balck; imprint and pointer white	SG1	A 1)	A 1)	A 1)	A 1)
Scale black; imprint and pointer yellow	SG2	A 1)	A 1)	A 1)	A 1)
Scale black; imprint white, pointer yellow	SG3	A 1)	A 1)	A 1)	A 1)
Vithout scale; pointer black	SG10	+	+	+	_
Vithout scale; pointer white	SG11	Α	Α	Α	_
Vithout scale; pointer yellow	SG12	Α	Α	Α	_
ersions without scales available only for panel meters that					
re connected to transformers or shunts					
Dial Illumination					
Vithout dial illumination	PA99	N	N	N	N
Vith direct dial illumination	PA1	_	A	A	A
Plexiglass scale, scale and dial illumination white)					
lote: Completion with Voltage Order No. <b>PB</b> necessary.					
lize 48 x 48: dial illumination available only for $\leq$ 4 A / $\leq$ 660 V					
ogether with single terminal cover.					
Vith indirect dial illumination:					
ight conductor with mask, dial illumination white	PA6	-	A	A	Α
ight conductor with mask, dial illumination red	PA7	-	Α	Α	Α
lote: Completion with Voltage Order No. <b>PB</b> and <b>SG</b> necessary					
SG 99 as light conductor with mask not available).					
Dial illumination available only with screw mounted scale (Order No.	SATT)				
/oltage for Dial Illumination					
12 V	PB3	-	+	+	+
24 V	PB5	-	+	+	+
28 V	PB6	-	+	+	+
IOUSING VARIANTS					
Application					
Standard version	LB99	N	N	N	N
ropic resistant	LB1	A	A	A	A
Topio Toolotuit	201	**		**	
rotection					
Standard (see technical data)	LH99	N	N	N	N
ront housing-panel protection IP54. clamps IP00	LH21	Α	Α	Α	Α
arthquake-proof (possible combination: LH99 or LH21)	LH10	Α	Α	Α	Α
ront Frame Colour					
Natt black	MA2	N	N	N	N
Matt grey RAL 7037	MA11	A	A	A	A
Matt stone grey RAL 7032	MA12	A	A	A	A
Matt light grey RAL 7035	MA14	A	A	A	_
Natt dark beige approx. RAL 1019	MA21	A	A	A	Α
ntermediate Frame, Height 3 mm					
Vithout intermediate frame	MC99	N	N	N	N
ntermediate frame shiny black	MC1	A	A	A	-
ntermediate frame shiny grey RAL 7037	MC2	A	A	A	A
ntormounds frame Jimiy arev IIAL /UU/	11104	-	r1	r1	ra .

<sup>1)</sup> Additional one-off costs for special scale printing on request





### Moving-coil movement, 240° scale Narrow front frame per DIN 43 718, matt black

### Please note when ordering:

Only one Identification No. with the same letter sequence may be chosen. Order No. with Identification No. N (standard model) can be left out.

	Type Order No. ⇒	V-PQ 48-250 1668P	V-PQ 72-250 1602P	V-PQ 96-250 1605P	PQ 144-250 1621P
HOUSING VARIANTS	ldentification + ↓				
Glass Window					
Standard version	MG99	N	N	N	N
Anti-glare glass	MG1	Α	Α	Α	Α
Housing					
Standard housing	ML99	N	N	N	N
Sheet metal housing with cone head rivets	ML4	_	Α	Α	N 1)
Housing for Mauell-Grid	ML5	+	_ 2)	_ 2)	_ 3)
Housing for H&B Unibloc-Grid	ML6	+ 4)	_ 2)	_ 2)	_ 3)
Mounting					
2 leaf springs	MN2	N	+	+	_
2 leaf springs for H&B Unibloc-Grid (bronze-springs)	MN4	Α	_	_	_
4 leaf springs	MN1	Α	Α	Α	_
Screw Clip S	MN14	Α	N 1)	N 1)	_
Screw Clip G	MN13	_	_	_	N
Fastener B DIN 43 835	MN11	_	A 5)	A 5)	Α
Subklew fastener (Screw Clip S without cone point)	MN32	Α	Α	Α	_
Without fastener	MN88	+ 6)	+	+	+
Identification					
Without Identification	MZ99	N	N	N	N
Identification on backside (specify in clear text)	MZ998	Α	Α	Α	Α
Marker Pointer					
Without marker pointer	PM99	N	N	N	N
Adjustable red index pointer	PM1	Α	Α	Α	
Label Strip					
Without label strip	SS99	N	N	N	N
Label on front face (specify in clear text)	SS992	Α	А	Α	Α
Contact Protection					
Without terminal cover	VB99	N	N	N	N
Overall terminal cover	VB2	Α	Α	Α	Α
Single terminal cover (Voltmeter and Ammeter $\leq 4$ A)	VB1	+	+	+	+

<sup>1)</sup> Standard version without extra charge

<sup>2)</sup> Standard housing (ML99) in combination with fastener MN2, also suitable for Mauell-Grid and H&B Unibloc-Grid
3) Standard housing (ML99) in combination with fastener MN11, also suitable for Mauell-Grid and H&B Unibloc-Grid

<sup>4)</sup> Available only in combination with Order No. MN4 (2 leaf springs for H&B Unibloc-Grid)
5) Available only in combination with Order No. ML4 (sheet metal housing with cone head rivets)
6) ML5 (housing for Mauell-Grid) standard version